

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1 (currently amended): A system for heating a biological site in a patient's body, the system including:

a transformer having a primary winding, a secondary winding and a ferrite core, the secondary winding having at least one tap to provide a ground reference and at least two sources of radio frequency (RF) energy; [[and]]

at least one active electrode connected to each source to apply energy from its associated source to the site, the energy applied by the at least one electrode of any one of the sources being out of phase with the energy applied by the at least one electrode of any of the other sources; and

an indifferent electrode, in the form of a backplate, connected to the ground reference of the tap with the ground reference of the tap and the indifferent electrode being tied to a ground reference on the primary side of the transformer.

Claim 2 (original): The system of claim 1 which includes an energy generator for generating the RF energy, the primary winding of the transformer being connected to an output of the energy generator.

Claim 3 (cancelled)

Claim 4 (previously presented): The system of claim 1 in which the transformer has a 1:1 ratio between the primary winding and the secondary winding.

Claim 5 (previously presented): The system of claim 1 in which the tap is a centre tap to provide two sub-windings which act as energy sources with the energy supplied by the sources being 180° out of phase with respect to each other.

Claim 6 (original): The system of claim 5 in which at least one active electrode is connected to a free end of each sub-winding opposite the end of the sub-winding connected to the tap.

Claim 7 (original): The system of claim 6 in which a plurality of electrodes are connected to the free end of each sub-winding, the electrodes being arranged in groups relative to the site.

Claim 8 (previously presented): The system of claim 6 in which the secondary winding has at least one intermediate tap between the ground reference tap and the free end of each sub-winding to provide more than two sub-windings acting as energy sources with at least one active electrode being connected to each intermediate tap.

Claim 9 (previously presented): The system of claim 1 in which the at least one active electrode is an electrode assembly comprising a co-axially arranged pair of electrodes, the electrodes of the assembly being displaceably arranged relative to each other.

Claim 10 (original): The system of claim 9 in which at least one of the electrodes has a helical tip to be screwed into the site.

Claim 11 (original): The system of claim 10 in which both electrodes of the assembly are helical-tipped to be screwed into the site.

Claim 12 (original): The system of claim 11 in which the helical-tipped electrodes are of different pitches so that the depth into the site to which the electrodes extend, in use, differ with respect to each other.

Claim 13 (currently amended): A method of heating a biological site in a patient's body the method including the steps of:

providing a transformer having a primary winding, a secondary winding and a ferrite core, the secondary winding having at least one tap to provide a ground reference and at least two sources of RF energy and an indifferent electrode, in the form of a backplate, connected to the ground reference of the tap with the ground reference of the tap and the indifferent electrode being tied to a ground reference on a primary side of the transformer;

connecting at least one active electrode to each source; and

attaching the at least one active electrode from each source to the site and applying the energy from the sources to the site, the energy applied by the at least one electrode of any one of the sources being out of phase with the energy applied by the at least one electrode of any of the other sources.

Claim 14 (original): The method of claim 13 which includes providing an energy generator for generating the RF energy and connecting the primary winding of the transformer to an output of the generator.

Claim 15 (cancelled)

Claim 16 (previously presented): The method of claim 13 which includes selecting the transformer to have a 1:1 ratio between the primary winding and the secondary winding.

Claim 17 (previously presented): The method of claim 13 which includes centre-tapping the transformer to provide two sub-windings which act as energy sources with the energy supplied by the sources being 180° out of phase with respect to each other.

Claim 18 (original): The method of claim 17 which includes connecting at least one active electrode to a free end of each sub-winding opposite the end of the sub-winding connected to the tap.

Claim 19 (original): The method of claim 18 which includes connecting a plurality of electrodes to the free end of each sub-winding and arranging the electrodes in groups relative to the site.

Claim 20 (previously presented): The method of claim 18 which includes forming at least one intermediate tap between the ground reference tap and the free end of each sub-winding to provide more than two sub-windings acting as energy sources and connecting at least one active electrode to each intermediate tap.

Claim 21 (previously presented): The method of claim 18 which includes arranging the electrodes transmurally at the site.

Claim 22 (previously presented): The method of claim 18 which includes arranging the at least one active electrode as a co-axially arranged pair of electrodes, the electrodes of the pair being displaceably arranged relative to each other.

Claim 23 (original): The method of claim 22 which includes providing at least one of the co-axially arranged pair of electrodes with a helical tip.

Claim 24 (original): The method of claim 23 in which both electrodes of the co-axially arranged pair of electrodes are helical-tipped and in which the method includes screwing the electrodes into the site to different depths to heat the site to the required depth.

Claims 25-28 (cancelled)